

BEFORE THE  
**Federal Communications Commission**

WASHINGTON, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )  
 )  
Advanced Television Systems And Their ) MM Docket No. 87-268  
Impact Upon The Existing Television Service )

To: The Commission

**COMMENTS ON MSTV AND ALTV PROPOSALS**

Mountain Broadcasting Corporation ("Mountain"), by its attorneys, respectfully submits these Comments on the recent filings by the Association For Maximum Service Television, Inc. and others ("MSTV") and the Association of Local Television Stations, Inc. ("ALTV") in the above-captioned proceeding.<sup>1</sup> Mountain is the licensee of WMBC-TV, Newton, New Jersey, a minority-owned station facing what may be the most dramatic and detrimental loss of service in the country due to the implementation of digital television ("DTV"). MSTV's proposals are a mixed blessing at best for WMBC-TV. They would slash the station's existing NTSC service area by half or more, in clear contravention of the policy goals in this proceeding. On the other hand, they demonstrate a possible improvement to WMBC-TV's DTV assignment that the Commission should fully explore.

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<sup>1</sup>Mountain filed a Petition for Reconsideration in this proceeding on June 13, 1997, which it supplemented on August 22, 1997. By Public Notice, released December 2, 1997, the Commission authorized the filing of additional comments in response to MSTV and ALTV by today.

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**1. The New Proposals Do Not Provide Protection To Existing NTSC Broadcasters On Channels 63 To 69.**

WMBC-TV is currently licensed to operate on Channel 63. As Mountain pointed out in its Petition, under the Commission's proposed table of DTV assignments the station will lose 19 percent of its existing NTSC service area population -- nearly one in five people -- to new interference during the transition to DTV.<sup>2</sup> No television station should be faced with a loss of 1.6 million people in its service area, particularly not a UHF, minority-owned, independent station licensed to a state that historically has been underserved by local outlets. Nor should such a significant portion of WMBC-TV's viewers be forced to give up its special program service, including local news and foreign language programming. While Mountain has supported the use of non-core spectrum such as channels 60 to 69 to the extent possible for DTV during the transition period, it also has made clear that such use must carefully be limited to preserve a meaningful level of existing NTSC service on those channels.

Unfortunately, MSTV's proposals ignore the concerns of Mountain -- and the Commission's own policy goal -- of preserving existing NTSC service during the transition to DTV. By MSTV's own calculations, its proposed table of assignments would slash WMBC-TV's existing service area by 44 percent, more than twice the already onerous losses imposed by the Sixth Order's table.<sup>3</sup> As demonstrated in the attached engineering statement from Robert du Treil, Jr., this evisceration of WMBC-TV's existing service would result

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<sup>2</sup>Sixth Report and Order in MM Docket No. 87-268, FCC 97-115, released April 21, 1997 ("Sixth DTV Order"). Appendix B, Table 1 at B-30.

<sup>3</sup>MSTV Ex Parte Submission, Exhibit 1A, at 29

largely from one DTV station -- the assignment of upper first adjacent channel 64 to WNET for DTV. Indeed, Mr. du Treil has calculated, using general FCC methodology, that this assignment actually could affect 56 percent of the service area population for WMBC-TV. Clearly, such a loss of service would be entirely unacceptable.

Ironically, MSTV's comments are intended to demonstrate that interference problems in the Northeast may be ameliorated with simple changes to the Commission's own table of assignments. No mention is made that MSTV's table would sacrifice existing service from WMBC-TV and perhaps other stations as well to achieve these purported benefits. Clearly, for WMBC-TV the loss of more than half its service area population hardly represents "Improvements to the DTV Table," as MSTV boldly characterizes its proposed table of assignments. Nor is it a "sensible solution" to a channel assignment problem. A plan which would devastate an existing station should not even be the subject of discussion at this late date.

ALTV's most recent filing seeks to allow DTV stations on UHF channels to operate at up to the maximum ERP using downward antenna beamtilt to limit radiation toward the horizon. ALTV states that its proposal would not result in any increased interference "above those levels that would exist under any DTV channel plan the FCC ultimately adopts."<sup>4</sup> Mr. du Treil indicates, however, that this proposal would tend to benefit stations that operate from antennas located very high above their primary markets. Because much of the interference to WMBC-TV is likely to come from stations operating from the World Trade

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<sup>4</sup>Letter from James B. Hedlund, President, ALTV to William Kennard, Chairman, FCC, dated November 25, 1997.

Center or Empire State Building, it would potentially suffer greater levels of interference than already predicted. WMBC-TV should not be facing the threat of even greater interference at this late date.

**2. MSTV's Proposal Suggests A Possible DTV Alternative For WMBC-TV.**

Mountain's Petition demonstrated that the assignment of DTV channel 8 to WMBC threatened the station with a crippling loss of 28 percent of its service area population on a permanent basis.<sup>5</sup> Mountain thus requested that the Commission consider the suitability of unassigned channel 34 for WMBC's DTV use, particularly in light of its concerns with service area replication. MSTV has now proposed to assign DTV channel 23 to WMBC-TV for DTV use with an average ERP of 50 kW.

The MSTV submission points out that the Advanced Television Technology Center recently has reported further laboratory testing concerning the effects of first-adjacent interference between DTV channels. According to Mr. du Treil, the results of this testing indicate that a significantly more restrictive D/U level is required: while the Commission had adopted D/U figures on the order of -42 dB and -43 dB for lower and upper adjacent-channel relationships, respectively, the revised figures are -23 dB and -21 dB, a difference of approximately 20 dB.

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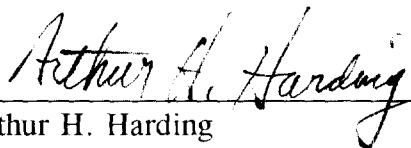
<sup>5</sup>This disparity in NTSC and DTV service reflects the fact the WMBC-TV's DTV assignment on channel 8 will receive interference from NTSC stations on channels 7, 8 and 9. If broadcasters are allowed to retain their existing core spectrum NTSC channels for DTV use at the end of the transition period, as the Commission has proposed, then these interfering stations are likely to keep their desirable assignments on lower channels and continue to cause interference to WMBC-TV's DTV operations forever. See Mountain's Petition at 5.

In light of this revised D/U criteria for first-adjacent channel DTV assignments, Mountain has revisited its proposal for channel 34. Prior interference calculations using the former criteria indicated no interference to WMBC-TV on DTV channel 34 from the DTV assignment to WPIX on channel 33. Under the revised criteria, however, the interference from WPIX's DTV assignment to WMBC-TV on channel 34 would affect a population of more than 500,000. This new analysis suggests that the Commission must carefully consider the effects of the revision of the first-adjacent DTV-to-DTV interference criteria when reconsidering the DTV table of assignments. It further suggests that the MSTV proposal of channel 23 would be a favorable alternative to channel 34 for WMBC-TV's DTV use with respect to the issue of DTV-to-DTV interference.

No particular station's existing level of service should be sacrificed pursuant to a DTV channel assignment plan, whether that plan is the Commission's own proposed table of assignments or an industry group's purported "improvements" to that table. Rather, the Commission should explore all possible alternatives that both provide service area protection during the transition and maximize service area replication for all broadcasters.

Respectfully submitted,

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Dated: December 17, 1997  
60655

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upon receipt by counsel.

***du Treil, Lundin & Rackley, Inc.***

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ENGINEERING STATEMENT  
IN SUPPORT OF COMMENTS ON MSTV AND ALTV PROPOSALS  
PREPARED FOR  
MOUNTAIN BROADCASTING CORPORATION  
NEWTON, NEW JERSEY  
CHANNEL 63

This Engineering Statement was prepared on behalf of Mountain Broadcasting Corporation, licensee of WMBC-TV, Newton, New Jersey (NTSC Channel 63), in support of comments on the recent filings of the Association for Maximum Service Television, Inc. ("MSTV") and the Association of Local Television Stations, Inc. ("ALTV").

MSTV Proposal

MSTV proposes a modification of the DTV Table of Allotments that involves over 350 changes in DTV channel allotments. These changes affect not only the proposed DTV channel coverage and interference areas, but also interference to existing NTSC stations.

MSTV proposes a number of DTV channel allotment changes in the New York metropolitan area where WMBC-TV is located. The change that most directly affects WMBC-TV is the proposed allotment of Channel 64 to WNET-DT. WNET-DT would be located at the World Trade Center in downtown New York and would operate on the first-upper adjacent channel to WMBC-TV. The D/U ratio for this relationship is -12 dB based on the FCC's OET Bulletin No. 69. Interference

calculations prepared according the FCC method\* for determining DTV coverage and interference indicate that a population of 4,488,422 within WMBC-TV's Grade B service area will be affected by interference from WNET-DT-64. This represents 56.0% of the population within the existing WMBC-TV Longley-Rice service area within its predicted Grade B contour, which is estimated to be 8,012,341.†

The MSTV submission proposes Channel 23 for WMBC-DT with an average ERP of 50 kW. An interference analysis reveals that Channel 23 would be subject to interference from NTSC stations WNJS, Camden, New Jersey (Channel 23) and WXXA-TV, Albany, New York (Channel 23). Although this interference is significant, the predicted noise-limited terrain-limited service area would exceed 10 million people. The use of Channel 23 under the MSTV proposal avoids the first-adjacent DTV-to-DTV interference situation that affects Mountain Broadcasting's proposal for the use of Channel 34.‡ Therefore, Channel 23, in the context of the MSTV proposal, appears to be a desirable alternative for WMBC-DT. The effects of first-adjacent DTV-to-DTV interference on Mountain Broadcasting's Channel 34 proposal are discussed further below.

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\* The so-called "radial-method" of calculating interference was employed in lieu of the grid method. The radial-method is at least as precise as the grid method and the results are very similar to the grid method.

† The FCC's Sixth Report and Order estimated WMBC-TV's Longley-Rice Grade B envelope coverage population at 8,387,000; the recent MSTV filing at 8,113,000.

‡ Mountain Broadcasting has proposed the use of Channel 34 as an alternative to Channel 8 for WMBC-DT in its Petition for Reconsideration of the FCC's DTV Sixth Report and Order.



Revised Interference Criteria

The MSTV submission points out that the Advanced Television Technology Center ("ATTC") has recently reported further laboratory testing concerning the effects of first-adjacent interference DTV-to-DTV.<sup>§</sup> The reported results indicate that significantly more restrictive D/U level is required for predicting interference for the DTV-to-DTV first-adjacent channel relationship. Where the Commission had adopted D/U figures on the order of -42 dB and -43 dB, for lower and upper adjacent-channel relationships, respectively; the revised figures are -23 dB and -21 dB, respectively. This approximately 20 dB difference can significantly affect the calculated interference for the DTV-to-DTV first-adjacent channel relationship.

In its Petition for Reconsideration, of the FCC's Sixth Report and Order Mountain Broadcasting suggested the use of Channel 34 as an alternative for WMBC-DT. The advent of the revised DTV-to-DTV D/U criteria has induced Mountain Broadcasting to revisit its proposal for Channel 34. Channel 34 was proposed for use by WMBC-DT with an average ERP of 50 kW. WPIX-DT was allotted Channel 33 in the FCC's DTV Sixth Report and Order. Prior interference calculations under the criteria of FCC Bulletin No. 69 revealed no interference to WMBC-DT on Channel 34 from WPIX-DT on Channel 33. However, under the revised criteria, the calculated interference to WMBC-DT

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<sup>§</sup> ATTC Document No. 97-06, July 17, 1997.

on Channel 34 from WPIX-DT on Channel 33 exceeds a population of 500,000.\*\* This suggests that Channel 34 may not be as desirable an alternative for WMBC-DT as originally thought; and that the Commission needs to carefully consider the effects of the revision of the first-adjacent DTV-to-DTV interference criteria when reconsidering the DTV Table of Allotments. These results also suggest that the MSTV proposed Channel 23 would be a favorable alternative to Channel 34 for WMBC-DT in this respect.

ALTV Proposal

The Association of Local Television Stations ("ALTV") proposed that all UHF stations be permitted to operate up to the maximum ERP using downward antenna beamtilt to limit radiation toward the horizon. This proposal would tend to benefit stations that are located very close to their primary markets and very high above their primary markets. For example, TV stations on the Empire State Building or the World Trade Center could employ a high gain antenna and perhaps  $-1.0$  or  $-1.5^\circ$  of beam tilt to increase the signal within about 10-20 miles of the transmitter site while maintaining the same ERP

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\*\* The revised interference calculation was based on the assumption that the D/U ratio for first-adjacent DTV-to-DTV relationship could be improved by 5 dB with the use of bandpass filter. The Commission should consider mandating the use of a stricter emission mask in instances where the potential exists for significant first-adjacent DTV-to-DTV interference. Mountain Broadcasting, itself, would prefer that the Commission allot a DTV channel to WMBC-DT that would not be subject to first-adjacent DTV-to-DTV interference. The MSTV has demonstrated that it may be possible to do so. However, this cannot and should not be at the expense of significant loss of existing NTSC service to any television broadcast facility.

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Page 5

toward the horizon. WMBC-TV's primary market is at about the same downward angle as the horizon. Therefore proper engineering design dictates that WMBC-TV focus its main beam of energy toward the horizon. Thus, WMBC-TV and other stations similarly situated would derive no benefit from the proposal. Furthermore, as in the case of WMBC-TV, because the interference to WMBC-TV would be due in large part from stations located on the Empire State Building or the World Trade Center, it would potentially suffer greater levels of interference than now predicted due to the higher signal levels closer to these sites if beam tilt were used as proposed by the ALTV. Thus, the ALTV proposal holds no benefit for stations such as WMBC-TV, and, in fact, the ALTV proposal would worsen the likely interference to WMBC-TV.

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December 17, 1997

## CERTIFICATE OF SERVICE

I, Eve J. German, a secretary at the law firm of Fleischman and Walsh, L.L.P.

hereby certify that copies of the foregoing "Supplement To Petition for Reconsideration"

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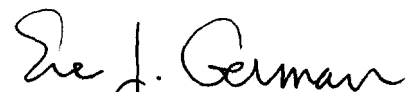
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